APPENDIX E
Field and Data Entry Worksheets

Examples of worksheets for Chain of Custody sheets (2 pages) and recording analytical results used by the City of Los Angeles' Environmental Monitoring Division are provided herein. They include shoreline beach observations, Chromogenic Substrate data entry, and Membrane Filtration data entry. Once completed, data are then entered into the LIMS database.

Date:

Department of Public Works
Bureau of Sanitation
Environmental Monitoring Division

Sample Chain of Custody

EMD
LIMS #: _____

EMD Sample ID: _____
Project Name: _____

Sampling Information:
Sampling Agency: _____
Agency Sample ID#: _____
Phone Number: _____
Fax Number: _____
Contact Person: _____
email address: _____

Sampler's Name: _____
Sampler's Title _____

Sampler's Signature: _____

Witness: Name _____
Title _____

Name _____
Title _____

Sample Location: _____

Sampling Program: _____

Purpose of program: _____

Report Time Frame: _____

Sample Date: _____

Sampling Time: _____

Sampling Address: _____

Requested Analysis:
Metals: ☐ Micro Biological: ☐
Organics: ☐ Toxicity: ☐
Conventional Chemistry: ☐ Air Testing: ☐
See back of page for specifics analyses

Sample Notification:

PC: _____ Date: _____
Wet: _____ Date: _____
Micro: _____ Date: _____

Toxicity: _____ Date: _____
Metals: _____ Date: _____
Semi-Vol: _____ Date: _____
Volatile: _____ Date: _____

Current Holder Name	Signature	Title	Received Date	Received Time	Released Date

Analysis to be performed on the Sample(s):

EMD
LIMS #: _____

	Locator:	Collection Time:		Locator:	Collection Time:
-1			-6		
-2			-7		
-3			-8		
-4			-9		
-5			-10		

Sample Information: Liquid: ☐ Solid: ☐ Other: ☐ Temperature _____
Grab ☐ Composite: ☐
Start time: _____ Finish time: _____ pH _____
Container: Glass Size: _____ Color: _____ Number: _____
Plastic Size: _____ Color: _____ Number: _____ Residual Cl2 _____
Preservative ☐ Number of samples: ☐

Metals:
☐ Ag ☐ Cu ☐ Pb ☐ Other: _____
☐ Al ☐ Fe ☐ Sb
☐ As ☐ Hg ☐ Se
☐ Ba ☐ K ☐ Sn
☐ Be ☐ Mg ☐ Sr ☐ Total
85 ☐ Ca ☐ Mn ☐ Tl ☐ Dissolved
☐ Cd ☐ Mo ☐ V
☐ Co ☐ Na ☐ Zn
☐ Cr ☐ Ni

Organics:
☐ VOC ☐ Pesticides/PCB ☐ Clopyralid ☐ Air VOC
☐ BNA ☐ Dioxin - screen ☐ Dioxin - low resolution ☐ Fixed Gases
☐ TOX ☐ Other: _____ ☐ Dioxin - high resolution ☐ GC Sulfur
☐ Herbicides ☐ Tributyltin ☐ Siloxanes

Conventional Chemical:
☐ Alkalinity ☐ MBAS ☐ Solids:
☐ BOD ☐ Nitrogen: ☐ Total Solids
☐ Boron ☐ Ammonia Nitrogen ☐ Total Dissolved Solids
☐ Chloride ☐ Nitrate-N ☐ Total Suspended Solids
☐ COD ☐ Nitrite-N ☐ Settleable Solids
☐ Conductivity ☐ Organic-N ☐ Volatile Suspended Solids
☐ Cyanide (Free) ☐ Kjeldahl Nitrogen ☐ Volatile Total Solids
☐ Cyanide (Total) ☐ Oil & Grease ☐ Sulfates
☐ Flashpoint ☐ pH ☐ Sulfides, Total
☐ Fluoride ☐ Phenols ☐ Sulfides, Dissolved
☐ Grain Size ☐ Phosphate, Total ☐ Thiosulfate
☐ Hardness ☐ Phosphate, Dissolved ☐ TOC
☐ Hexavalent Chromium ☐ Radioactivity ☐ Turbidity
☐ H_2S ☐ Salinity ☐ Other:

Biological:
☐ Total Coliform ☐ Salmonella ☐ Other: _____
☐ Fecal Coliform ☐ Acute Toxicity (Fresh water)
☐ E. coli ☐ Chronic Toxicity (Sea water)
☐ Enterococcus ☐ Chronic Toxicity (Fresh water)

Remarks: _____

Date:_____

Read by:_____ Time:_____

Environmental Monitoring Division

Microbiology Group

Validated:_____

TOTAL

SHORELINE QUANTITRAY COUNTS

Station	S01	S02	S03	S04	S05	S06	S07	S08	S09	Blank	Dup
10 ml											
Large cells											
Small cells											
Blank 100 mL										Blank	
Large Cells											
Small Cells											

E. coli

Station	S01	S02	S03	S04	S05	S06	S07	S08	S09	Blank	Dup
10 ml											
Large cells											
Small cells											
Blank 100 mL										Blank	
Large Cells											
Small Cells											

Date: _____SHE

ENVIRONMENTAL MONITORING DIVISION
MICROBIOLOGY UNIT

Entered by: 1: _____ 2:
Validated by:

SHORELINE BACTERIAL DENSITIES

ENTEROCOCCUS

Read by: _____ Time:

VOL. (mL)	01	02	03	04	05	06	07	08	09	DUP
10										
50										
100										

ENTERO/100 mL

VOL. (mL)	10	11	12	13	14	15	16	17	18	DUP
10										
50										
100										

ENTERO/100 mL

SMBBB TMDL SOUTH BEACH OBSERVATION SHEET

DATE (Day/Month/Year): SAMPLER NAME AND INITIAL: HTP LOGIN #:

STATION ID	POINT ZERO SITES																				STATION ID	OPEN BEACHES				
SAMPLE TIME																					SAMPLE TIME					
Beach Refuse																					Beach Refuse					
Ocean Debris																					Ocean Debris					
Seaweed																					Seaweed					
Tar																					Tar					
Rubber / Plastic Goods																					Rubber / Plastic Goods					
Plankton Color																					Plankton Color					
Dead Marine																					Dead Marine					
Sewage Grease																					Sewage Grease					
Sewage Susp. Solids																					Sewage Susp. Solids					
Odor																					Odor					
Oil																					Oil					
Foam																					Foam					
Bathers																					Bathers					
Animals / Birds																					Animals / Birds					
Storm Drain Flow																					Storm Drain Flow					
Storm Drain Position																					Storm Drain Position					
Tide Height*																					Tide Height*					
Reached Surf																					Reached Surf					
Reverse Flow																					Reverse Flow					
Conductivity (Reverse Flow only)																					Conductivity (Reverse Flow only)					

CODE	0	1	2	3	4	5	6	7
Reverse Flow	NO	YES						
Reached Surf	NO	YES						
Storm Drain Position	Buried in Sand	Submerged(Not Sampled)						
Storm Drain Flow	Dry	Ponded	Low Flow (garden Hose)	Medium flow (between 2 and 4)	Heavy flow (Fire Hose)			
Plankton Color		Brown	Green	Red	Yellow	Blue-Green		
Dead Marine		Fish	Jellyfish	Seal	Dolphin	Bird	Whale	Crab
Odor		Sewage	Oil	Chemical	Marine			
Foam		Some	Heavy					
Animals / Birds or Bathers (50 yards each direction)		1 to 5	5 to 10	10 to 20	20 to 50	50 to 100	> 100	

NOTE: DO NOT PUT YOURSELF AT RISK IN ORDER TO COMPLETE THIS FORM

COMMENTS:

WEDNESDAY (accelerated)

DATE:

SAMPLER NAME AND INITIAL:

HTP LOGIN #:

STATION ID								
SAMPLE TIME								
Beach Refuse								
Ocean Debris								
Seaweed								
Tar								
Rubber / Plastic								
Plankton Color								
Dead Marine								
Sewage Grease								
Sewage Susp. Solids								
Odor								
Oil								
Foam								
Bathers								
Animals / Birds								
Storm Drain Flow								
Storm Drain Position								
Tide Height*								
Reached Surf								
Reverse Flow								
Conductivity (Reverse Flow only)								

FRIDAY (accelerated)

DATE:

SAMPLER NAME AND INITIAL:

HTP LOGIN #:

STATION ID								
SAMPLE TIME								
Beach Refuse								
Ocean Debris								
Seaweed								
Tar								
Rubber / Plastic								
Plankton Color								
Dead Marine								
Sewage Grease								
Sewage Susp. Solids								
Odor								
Oil								
Foam								
Bathers								
Animals / Birds								
Storm Drain Flow								
Storm Drain Position								
Tide Height*								
Reached Surf								
Reverse Flow								
Conductivity (Reverse Flow only)								

	WEATHER - NORTH BEACH		
	MON	WED	FRI
DATE			
SAMPLER			
Weather			
Wind Direction			
Sea Conditions			
Air Temp			
Surf Temp			
Wave Height			

CODE	1	2	3	4	5	6	7	8
WEATHER	Fair	Cloudy	Fog	Rain	P-Cldy	Hazy	Overcast	
SEA	Calm	Chop	Waves					
WIND DIRECTION	N	NE	E	SE	S	SW	W	NW